CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:

Arntzen EQIP

Proposed

Implementation Date: S

Summer 2020

Proponent:

Doug & Keith Arntzen

Location:

18N 19E 7 & 18

County:

Fergus

Trust:

Common

I. TYPE AND PURPOSE OF ACTION

The proponent has requested to install a water pipeline and a new cross fence on their state lease as a part of their EQIP plan. No water tanks will be placed on State land. The plan is to rotate a herd of around 50 - 60 cows through the summer and the new water and pastures will give them the opportunity to change season of use.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

Department of Natural Resources and Conservation (DNRC)

Northeastern Land Office (NELO)

Doug & Keith Arntzen (Lessee)

OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

The DNRC and NELO have jurisdiction over this proposed project.

This project will require a Land Use License issued by NELO.

DNRC is not aware of any other agencies with jurisdiction or other permits needed to complete this project

3. ALTERNATIVES CONSIDERED:

Alternative A (No Action) – Under this alternative, the Department does not grant permission to install the new fence and pipeline.

Alternative B (the Proposed Action) – Under this alternative, the Department does grant permission to install the new fence and pipeline.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.
- Enter "NONE" If no impacts are identified or the resource is not present.

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

	s	ummary by Map Unit -	Fergus County, Montana (MT027)			
Summary by Map L	Init — Fergus County, Montana (MT027)					(8
Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
12	Adger-Nobe clays, 0 to 2 percent slopes	Slight	Adger (60%)		30.1	8.9%
			Nobe (30%)			
			Daglum (10%)			
37	Cabba-Doney-Wayden complex, 4 to 8 percent slopes	Slight	Wayden (30%)		15.4	4.6%
			Cabba (30%)			
			Doney (30%)			
			Winifred (10%)			
69	Doney-Windham complex, 15 to 45 percent slopes	Moderate	Doney (50%)	Slope/erodibility (0.50)	3.1	0.9%
			Windham (30%)	Slope/erodibility (0.50)		
			Tally (5%)	Slope/erodibility (0.50)		
			Vebar (5%)	Slope/erodibility (0.50)		
80	Eltsac-Norbert clays, 8 to 25 percent slopes	Moderate	Eltsac (50%)	Slope/erodibility (0.50)	63.6	18.8%
			Norbert (45%)	Slope/erodibility (0.50)		
130	Judith-Tamaneen clay loams, 0 to 2 percent slopes	Slight	Judith (60%)		1.3	0.4%
			Tamaneen (30%)			
			Windham (10%)			
159	Marcott silty clay loam	Slight	Marcott (90%)		41.3	12.2%
			Marcott (5%)			
			Sudworth (5%)			
179	Norbert-Eltsac clays, 15 to 60 percent slopes	Severe	Norbert (65%)	Slope/erodibility (0.75)	174.9	51.6%
			Eltsac (25%)	Slope/erodibility (0.75)		
218	Tamaneen clay loam, 0 to 2 percent slopes	Slight	Tamaneen (90%)		3.1	0.9%
			Turner (10%)			
273	Winifred-Judith clay loams, 8 to 15 percent slopes	Slight	Winifred (50%)		5.8	1.7%
			Judith (25%)			
			Judith (9%)			
			Windham (8%)			
			Linwell (8%)			
Totals for Area of	Interest				338.7	100.00

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- The pipeline will cut through soils 179 which has a "severe" rating regarding off-road erosion hazard. These soils are found on the hills with a slope of 15 to 60%. Mitigation techniques such as water bars or straw waddles may need to be used until permeant vegetation is established and the erosion potential is reduced.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- The addition of an off-stream source of water may reduce the turbidity and erosion of Dog creek.

AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

Current plant community is dominated by Kentucky bluegrass, Needle and thread grass, Prairie junegrass and Sandbergs bluegrass.

The will be some ground disturbance and bare ground created associated with the stockwater and fence installation. These areas will be prone to noxious weed infestations. Frequent scouting should occur until revegetation has occurred to suppress noxious weed establishment. Knapweed is known to be in the area and efforts to keep them from establishing on the disturbed area will be implemented.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- Bare ground associated with the installation of a stockwater pipeline will revegetate with grass & shrubs in a few years. The Area of Potential Effect (APE) will remain visible for many years.

TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

A search was conducted on the Montana Natural Heritage site for potential "Species of Concern" in the general area.

Species of Concurn I Species Whered by the following criteria: If Status + Species of Concurn Compiler + S18NO1B2 - (based or mage	oul Species Occurrences)									
SCHUTTIC HANG COMMON NAME TAXA SORT	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE PANK	usres	USFS	ELA.	PNP SWAP	% OF GLOBAL BREEDING RANGE IN HT		PLUES OF CONCERN CONCE
asiurus cinereus	Vespertilionidae	2124	7.1				990H3	29	1009	Rigarian and forest
reary Est	5013	Species Occurrences verific	ed in these Counties: Descript	ead, by Horn, Blavie, Grosdwei	Pr., Larbon, Carler, Cristade, Universi-	so Comer, Daniela, Daniela, Frenchista, F	allian, Fergus, Fostbend, Girllatin, Gr	rived, Sucrey, Guideo Valley, Grante, it es, Youie, Treman, Voiley, Whestland S	NJ, Jefferson, Joseph Bener, Lake, Len	is and Clink Literay, Director, Mislandr,
	Vespertillonidae 590	Species Occurrences verifie	ed in these Counties; hours	end, dig Horn, Ecolor, Struaters	er, Carbon, Carber, Cascarie, Claures	ss. Coster, Daniela, Gawann, Diver Leaten, F	Sport Service Faithern Galletin Go	ortield, Glasser, Golden Volley, Gosnate, II	100%	Generalist to and Clark Director, Naphron, Alectors.
lyotis lucifugus Little Brown Mystig		Species Occurrences verific	ed in those Counties; however it, Park, Petroleurs, Phillips, Pr	not, for Horn, focior, breadest tinders, Powder River, Powell, 8	er, Carbon, Carter, Cascare, Chouren Valore, Rossell, Rochland, Xposevell, 1	III. Custav, Daniela, Gawano, Devr Lodgo, F Proetard, Saniders, Marcidan, Silver Bow, St e Spridrome, a furqual dhessa cespumidale to	Police, Forgos, Fastined, Gallarian, Gr Influence, Sweet Grass, Tellan, Toole,	Vield, Slacur, Entities Votley, Conste, N Transpore, Valley, Wheelfood, Wilson, Y	100%	
ittle Brown Mystle (Incols (A.V.E.S) CREATURE NAME		Species Occurrences verific	ed in those Counties; however it, Park, Petroleurs, Phillips, Pr	not, for Horn, focior, breadest tinders, Powder River, Powell, 8	er, Carbon, Carter, Cascare, Chouren Valore, Rossell, Rochland, Xposevell, 1	III. Cuture, Partieta, Gawani, Diver Leiten, F Pureland, Serugera, Merciden, Stinet Row, St.	Police, Forgos, Fastined, Gallarian, Gr Influence, Sweet Grass, Tellan, Toole,	Vield, Slacur, Entities Votley, Conste, N Transpore, Valley, Wheelfood, Wilson, Y	1004 Hil, Jefferson, Indich fiesis, Like, Lew Plansition	
THE DEPOSE (AVES) THE THE COMMON MADE THAT DOES THAT DOES THAT DOES	FANEY (SCENTURE) FANEY (SCENTURE) FANEY (SCENTURE) FANEY (SCENTURE)	Species Octorranges verifications of manufacture State Rank Respond Species Global Rank	51 ed in these Counties to bound of the Counties of the Counti	each, dig Horn, Contro, Srusdens sodies, Plander Reed, Plandel, di under significant Chresi of ca USPNS META; SCC11, SCC17	P., Carles, Carler, Cascare, Chores Valve, Rascil, Roblant, Zeowest, I testophi, decline due to White Nas USFS	III. Contrar, Devicto, Devictor, Devictorio, Promised, Similare, S	2001 Cores Tengos, Parahandi, Garanian, Gillindore, Sengos, Parahandi, Garanian, Gillindore, Sweet Crass, Felium Toole, to the collapse of expediations of the Parahaman Cores (Cores Parahaman) Par SWAP 2001	Held, Caren College Wales, Garante, in Trecure, Valley, Wheeland, Wilesal, Youngel on in the notions UK. NOT GLOBAL BREEDING RANCE IN ATT 188	100A III., performen, particle besse, Laker, Lee Principles N OF MY THAT IS BATCHING BANCE 979	HABITAT Gressens
the provin Myself There's (AV.S) PENTIFIC NAME COMMON SAME TAX 1004 TAX 1004 FOR 1004 FOR 1004	FARILY (SCENTIFIC) FARILY (SCENT	93 Species Octorrances verification of the state of the s	51 del in there Countries Theorethe C. Park, Persidente, Petitigs, Pi L. Common and Pi L. Co	end, dig kten, frame, brundmet kinders, Provider Aver, Psycoli, il di onder significant choese of co users social social with social social with social social feet of casualts, chouless. Curi	er, Carlon, Carlon, Cascare, Clover Valore, Russell, Rosland, Rossovell, R hadrophic deciden due to White Mass USPS er: Earners, Swende, Paplore, Fergo, C	IN. Critier, Devices, Devices, Device, Device, Por Cologo, P. Porthad, Sander,	9001 Stock Pergy, Person Stock Pergy	Herman Communication (Communication Communication Communic	100h 10, reference, outsit besit, take, the reference of the control of the cont	HABITAT GOBERNS GORERNS GOR
COMMON HAME COMMON HAME	FANEY (SCENTURE) FANEY (SCENTURE) FANEY (SCENTURE) FANEY (SCENTURE)	Species Occarrences verification of the species of	3) gd in these Constitute, beautiful, Park, Missississississississississississississ	And Sig Horn, States, Providents Nothers, Provider Alexa, Provider Nothers, Provider Alexa, Provider Anders apprificated choose of co- control of the Control of Control Andrea Society, Society Carter, Canada, Chronicum, Control Andread, Woods, Appears for a Principles of the Control Appears for the additional states SOSPAN AREA SOCIETY SOSPAN A	er, Carbon, Carbon, Cascarin, Clavaria Tradition, Results, Recibiant, Respectivit, Italiant Scholant, Bernardia, Italiant Scholant, Bernardia, Italiant Scholant, Bernardia, Statistical Scholant, Scholant, September 2018, produktivan korre Larentee	Int. Contains, Damains, Demons, Dever Contagn, Francisco, Services, Samulans, Samulans	FOOT 1 FO	Serviced, Cascar, Coder ways, Lanutz, or Treasure, Valley, Miteralied, Velhoutz, Tryanice, Valley, Miteralied, Velhoutz, Tryanice in the enterior U.S. S.OF GLORAL BRITTING RANCE IN AT 159 S.OF, SANCE SHOW MARKET STATES AND ADMINISTRATION OF THE STATES AND ADMINI	1009 IN, parformer, jobich bese, Late, Le- plandiere * OF AT THAY IS ENECOMING EARCH 479 LACE 1979 LACE	HABITAT O'SE PASS FOR THE STATE OF THE STA

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

A Class I (literature review) level review was conducted by the DNRC staff archaeologist for the area of potential effect (APE). This entailed inspection of project maps, DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. The Class I search revealed that *Antiquities* have not been identified in the APE. No additional archaeological investigative work will be conducted in response to this proposed development. However, if previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

Alternative A (No Action)-No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

IV. IMPACTS ON THE HUMAN POPULATION

- RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.
- Enter "NONE" If no impacts are identified or the resource is not present.

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

EA Checklist Prepared By: Name: Brandon Sandau
Land Use Specialist

Signature: Date: July 23, 2019

V. FINDING

25. ALTERNATIVE SELECTED:

Alternative B (the Proposed Action) – Under this alternative, the Department does grant permission to install the cross fence and pipeline.

26. S	26. SIGNIFICANCE OF POTENTIAL IMPACTS:							
No si	No significant impacts expected.							
27. N	27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:							
	EIS			More Detailed EA XXX		No Further Analysis		
			·					
	EA Checklist Approved By:		Name:	Jocee Hedrick				
			Title:	Unit Manager, Northeastern Land Office				
5	Signatu	re: (Joce	· Hobrick	Date	e: July 23, 2019		
		/	/					

Plan Map Field Office: LEWISTOWN FIELD OFFICE Agency: USDA-NRCS Date: 4/11/2019



